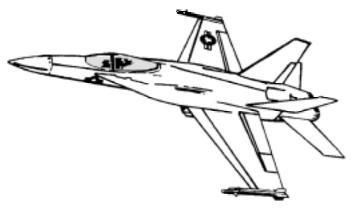
# CHANGE NOTICE

A1-F18AE-LWS-320

# **Conventional Weapons**

F/A-18 MK-62/63 SERIES MINE



REPRINT

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NATEC ELECTRONIC MANUAL

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Pg. No. Chg. No. Title	1 2 3 - 13	1 0	15 16 - 17 18 - 21	0 1 0

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### **TABLE OF CONTENTS**

TITLE	PAGE
Changes Incorporated	. А
Table of Contents	
Introduction	
Required Reading	. i
Aircraft Preparation/Inspection	. 1
Weapon Inspection	. 2
Weapon Loading	. 13
Postloading Inspection	. 19
Weapon Unloading	. 20

### INTRODUCTION

This checklist contains abbreviated procedures to load and unload MK 62/63 Mines on the F/A-18 aircraft.

### REQUIRED READING

Loading crew members may perform several steps simultaneously provided they do not invalidate or interfere with a preceding or subsequent step and safety precautions are strictly observed.

The steps within this checklist to SAFE racks mean rotation of ground safety handle to the LOCKED position.

Ensure compliance/incorporation of the following Technical Directives, as applicable:

1 None.

### RESTRICTIONS:

 Only arming wires furnished by mine assembly personnel will be used.

i

## **REQUIRED READING (Continued)**

### TEST EQUIPMENT/SPECIAL TOOLS:

1. None.

For specific flight authorization, refer to the Tactical Manual. The procedures 
in this checklist have been verified for the following weapon:

MK 62 Mine w/MK 15 Fin MK 62 Mine w/BSU-86 Fin MK 62 Mine w/MK 16 Tail Section MK 63 Mine w/MAU-91 Fin MK 63 Mine w/MK 12 Tail Section

### AIRCRAFT PREPARATION/INSPECTION

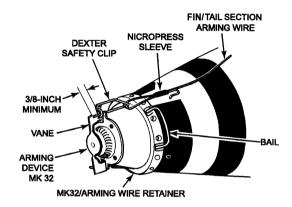
1.	Re	elease and Control Systems Checks completed	)				
2.	Lo	Loaded stations - SAFE(					
3.	Pa	rent rack configured to load single weapon:					
	a.	Cartridges removed(	)				
	b.	Swaybraces adjusted to normal position(	)				
	C.	Suspension hooks open	)				
4.	Pa	rent rack configured with BRU-33:					
	a.	Ground safety handle LOCKED(	)				
	b.	Cartridges removed(	)				
	C.	Swaybraces seated(	)				
	d.	Adapter harness connected(	)				
	e.	BRU-33:					
		(1) Ground safety handle UNLOCKED	)				
		(2) Cartridges removed	)				
		(3) Swaybraces adjusted to normal position					
		(1) Suspension hooks open	١				

	WEAPON INSPECTION
<ol> <li>Verify mir</li> <li>Assemble</li> </ol>	Weapon Assignment Sheet(s) available
WARNING	IF ARMING WIRE IS INADVERTENTLY WITHDRAWN FROM THE TARGET DETECTING DEVICE (TDD) OR RED IS VISIBLE IN ARMING DEVICE INSPECTION WINDOW, CLEAR AREA AND NOTIFY PROPER AUTHORITY.
WARNING	IF ARMING WIRE/SAFETY CLIP IS MISSING FROM THE ARMING DEVICE, THE ARMING DEVICE MUST BE CONSIDERED ARMED. IF AN ARMED OR PARTIALLY ARMED CONDITION IS INDICATED. NOTIFY PROPER AUTHORITY.
WARNING	BLACK LETTER "A" AGAINST RED BACK- GROUND IN THE INSPECTION WINDOW INDICATES A FULLY ARMED ARMING DEVICE. NOTIFY PROPER AUTHORITY.
WARNING	IF WHITE "S" ON GREEN BACKGROUND IS NOT VISIBLE IN INSPECTION WINDOW OR IF A DULL GRAY BACKGROUND APPEARS IN INSPECTION WINDOW, THE ARMING DEVICE IS PARTIALLY ARMED. NOTIFY PROPER AUTHORITY.
windo	
<ul><li>b. Verify</li></ul>	fin/tail section to arming device wire is installed in

c. Ensure safety wire is removed from arming vane and

outer (small) hole of arming device vane with safety clip . . . . ( )

guide .....()



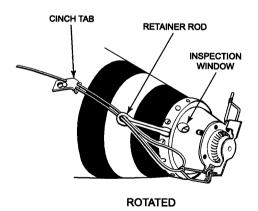


Figure 1. MK 32 Arming Device

	WEAPON INSPECTION (Continued)	
5.	d. Verify water tight screw is installed in set screw hole and water tight plug installed in electric fuze cable well (Verify safe condition of MK 57 TDD as follows (Fig. 2):	)
WAF	IF ARMING WIRE/SAFETY CLIP OR SAFETY PIN IS MISSING FROM THE TDD, IT MUST BE CONSIDERED ARMED. CLEAR AREA AND NOTIFY PROPER AUTHORITY.	
6.	a. Verify TDD arming wire/safety clip is installed through pop-out pin; tagged safety pin removed	)
	<ul> <li>a. Fin in "X" configuration; suspension lugs installed/aligned(</li> <li>b. (MK 15) Fin release wire from forward lug through arming adapter, release band latch, guide tube, and extends approximately 10 inches beyond fin; safety cotter pin</li> </ul>	)
	installed	
	swivel stowed; safety cotter pin installed( d. TDD arming wire attached to top fin link pin, through hole in fin, through TDD pop-out pin, extends below fin	)
	6 inches	)
	arming device guide and vane( f. Fin to arming device wire attached to bottom fin link pin, routed along under side of mine, safety clip installed in	)
	small (outer) hole of arming device guide and vane(	)
7.	MK 62 w/MK 16 tail section (Fig. 4): a. Fin in "X" configuration; suspension lugs installed/aligned(	)
	<ul> <li>b. Verify arming wire retainer properly installed</li></ul>	)
	remove slack in cable	)

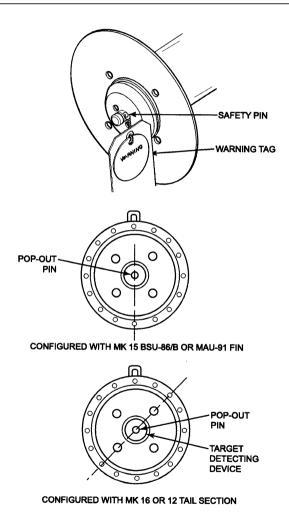


Figure 2. MK 57 Target Detecting Device (TDD)

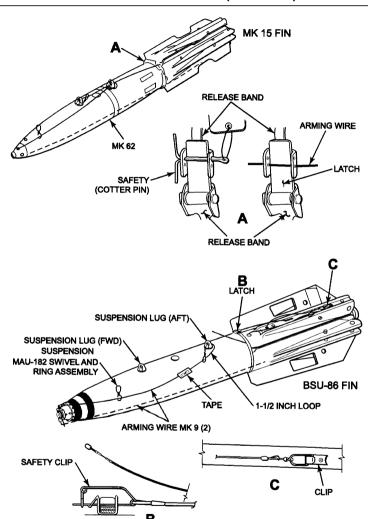


Figure 3. MK 62 w/MK 15/BSU-86 Fin

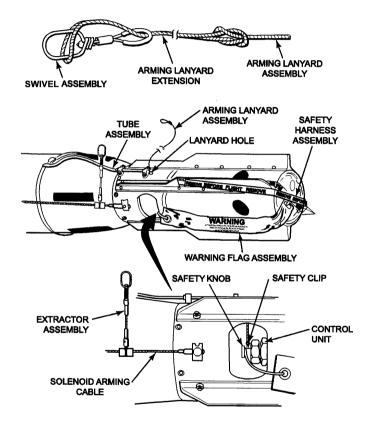


Figure 4. MK 62 w/MK 16 Tail Section (Sheet 1 of 2)

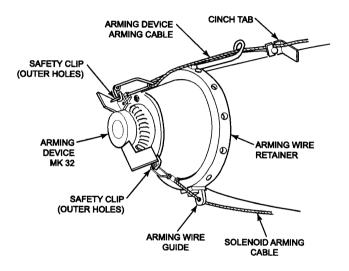


Figure 4. MK 62 w/MK 16 Tail Section (Sheet 2)

8.	e. f. g. h.	Solenoid arming cable safety clip installed in small (outer) hole of arming device guide and vane; routed along left side of mine; through extractor assembly; secured to side of tail assembly	)
		, • ,	
NOTE:		MK 63 MINE WITH MAU-91 FIN MUST HAVE REAR LUG BACKED OUT TWO TURNS FROM FLUSH.	
	a.	Fin in "X" configuration; suspension lugs properly	
		installed and aligned	)
	b.	Verify fin locking pins installed; locking chain passes	
	_	under release lanyard	)
	C.	Fin release lanyard installed in lanyard channel; release pin secure to lanyard and installed in release band latch	
		from forward side; lanyard with swivel routed through aft	
		suspension lug; release band safety (cotter) pin installed (	)
	d.	TDD arming wire attached to hole in fin blade, through	
		hole in top of fin, through TDD pop-out pin, extends	,
	_	six inches below fin	)
	С.	MAU-182 with safety clip installed in outer (small) hole	
		of arming device guide and vane	)
	f.	Fin to arming device arming wire attached to slot in	
		bottom of fin, routed under side of mine, with safety clip	
		installed in outer (small) hole of arming device guide and vane	١
		and valie	,

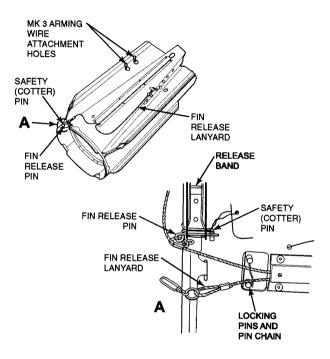
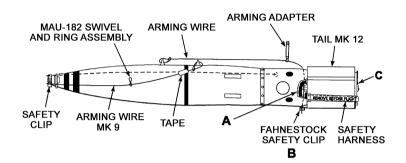


Figure 5. MK 63 w/MAU-91 Fin

			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	01.011 (0.	ontinada)		
9.	MK	63 w/N	MK 12 tail sect	on (Fig. 6):			
NOTE:				LUG BACKED	AIL SECTION MUST OUT TWO TURNS		
		installe	ed and aligned			.(	)
		througl	h hole in tail w	th safety clip in	I section; routed stalled in parachute		
	C.	Parach lug, thr througl	nute control un rough arming a h control unit a	t arming wire at dapter, through ssembly and ex	ttached to forward  hole in top of tail,  tends below tail;  rming wire below	.(	)
WAF			IF ARMING W	'IRE/SAFETY C THE TDD MUS	CLIP IS MISSING T BE CONSIDERED O NOTIFY PROPER	.(	)
	е.	Arming assem rod, sa	device arming bly, routed aloufety clip install	cable exits rig ng side of mine, ed in outer (sma	TDD pop-out pin ht side tail , through retainer all) hole of arming n rod; cinch tab	.(	)
	f.	Arming	device armin	g wire attached	to aft lug, through outer (small) hole	.(	)
		of armi	ina device aui	la and vana		1	١



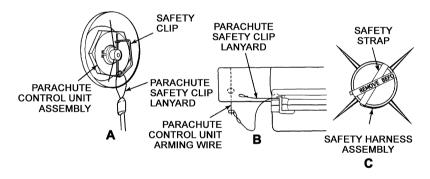


Figure 6. MK 63 w/MK 12 Tail Section

# **WEAPON LOADING**

			reparation/Inspection and Weapon Inspection	
	2. 3. 4. 5.	3. Aircraft grounded		
NO	TE:		WEAPON MUST BE LOADED AS DIRECTED IN AIRBORNE WEAPON ASSIGNMENT SHEET.	
B.	LO	ADING		
٧	/AF	RNING	IF ARMING WIRE IS INADVERTENTLY WITHDRAWN FROM TDD OR ARMING DEVICE, CLEAR AREA AND NOTIFY PROPER AUTHORITY.	
٧	/AF	RNING	IF WHITE "S" ON GREEN BACKGROUND IS NOT VISIBLE IN ARMING DEVICE INSPECTION WINDOW, NOTIFY PROPER AUTHORITY.	
	CAL	JTION	DURING WEAPON LOADING ENSURE LOWER ARMING WIRE IS NOT WITHDRAWN.	
NO	TE:		(MK 63 w/MAU-91) HOLD RELEASE BAND LANYARD OUTSIDE OF SWAYBRACE WHILE RAISING WEAPON.	
NO	TE:		(MK 62 w/MK 15 ON BRU-33) INSTALL ARMING ADAPTER ON RIGHT FORWARD SWAYBRACE BEFORE ENGAGING LUGS IN SUSPENSION HOOKS.	

**MINES** 

### Table 1. Aircraft Armament Switches

PANEL	SWITCH	POSITION
MC/HYD ISOL	MC	NORM
NUC WPN SWITCH	NUC WPN	DISABLE (down position)
GND POWER CONTROL	1 2 3 4 EXT PWR	AUTO AUTO AUTO AUTO OFF
LEFT VERTICAL	SELECT JETT JETT (pushbutton)	SAFE off
MASTER ARM CONTROL	MASTER EMERG JETT (pushbutton)	SAFE Yellow/brass ring not visible
ECM CONTROL (NOTE 1) ICMDS (NOTE 2)	AUX REL ECM DISPENSER MODE SEL RWR	NORM OFF OFF STBY OFF
ANTENNA SELECT CONTROL PANEL (NOTE 3 and 4)	ALE-39 RESET	OFF
EMERGENCY JETTISON	(Rear cockpit) EMERG JETT	Yellow/brass ring not visible
ITALD CONTROL (If installed)	INSTM POWER CIRCUIT BREAKER	OFF RESET
AN/ALQ-167 CONTROL (If installed)	PWR	OFF
MAP GAIN CONTROL	IR COOL	(NOTE 5)
COMMUNICATION	WPN VOL control	LOW
FWD/REAR COCKPIT	All other switches	OFF, SAFE, or NORMAL

### NOTE

- 1. 161353 thru 164980

F/A-18

- 165171 and UP
   161353 thru 163175
- 4. 163427 thru 164980
  5. Without AIM-9L/M or with AIM-9X -OFF position, and NORM position with AIM-9L/M

	WEAPON LOADING (Continued)	
	Raise weapon; if applicable, connect arming adapter (Continue raising weapon; latch suspension hooks	)
3.	ensure hooks support weapon and swaybraces seat	
4.	Connect arming wires/lanyards (Figs. 7 and 8)	
CAL	CONTROL UNIT SAFETY PIN MUST BE IN LINE WITH LANYARD HOLE IN FIN AFTER REMOVAL OF SAFETY KNOB.	
5. 6.	(MK 62 w/MK 16 Tail) Remove safety knob with warning flag; safety pin aligned with hole in fin	)
	section as follows (Fig. 6)  a. Remove safety clip from parachute control unit	)
	unit arming wire	)
7	then lower tail	)
8.	release band safety (cotter) pin	-
Ο.	motali dartinges	,

## **WEAPON LOADING (Continued)**

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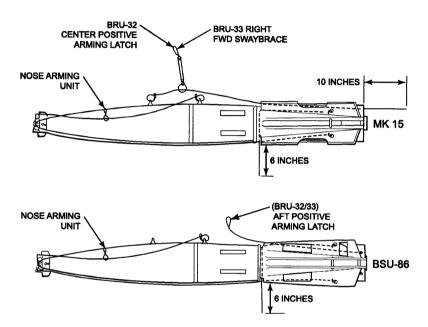
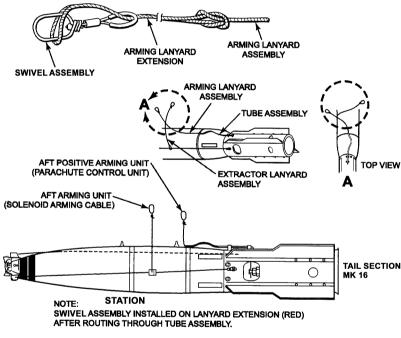


Figure 7. MK 62 Mine Arming Wire Installation (Sheet 1 of 2)

### **WEAPON LOADING (Continued)**



WHEN LOADING LEFT VER STATION, ENSURE LANYARD EXTENSION (PARACHUTE) CROSSES AFT OF SOLENOID ARMING CABLE EXTRACTOR ASSEMBLY.

Figure 7. MK 62 Mine Arming Wire Installation (Sheet 2)

# **WEAPON LOADING (Continued)**

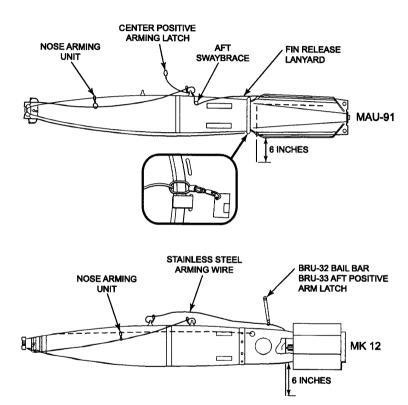


Figure 8. MK 63 Mine Arming Wire Installation

### POSTLOADING INSPECTION

1.	Armament switches positioned (Table 1)	)				
2.						
3.						
4.	Rack - SAFE (					
5.	Swaybraces seated	•				
6.	Cartridges installed					
7.	BRU-33:	ĺ				
	a. Rack safe(	)				
	b. Unloaded station suspension hooks open(	)				
	c. Cartridges installed					
	d. Adapter harness connected	)				
8.	Arming wires/lanyards installed	)				
9.	Arming device safety wire removed	)				
10.	(MK 62 w/MK 15/BSU-86, MK 63 w/MAU-91) Fin release					
	band safety pin removed(	)				
11.	(MK 62 w/MK 16 Tail):					
	a. Fin to arming device cable installed	)				
	b. Safety knob with warning flag removed(	)				
	c. Safety harness removed from tail section(	)				
12.	MK 12 Tail:					
	a. Fin to arming device arming cable installed	)				
	b. Arming device arming cable installed/connected (	)				
	c. Parachute control unit arming wire					
	installed/connected	)				
	d. Tail section safety harness removed					
13.	3. Proper code set in Weapon Insertion Panel (SMP)					

# WEAPON UNLOADING

A. PR 1. 2. 3. 4. 5. 6.	WEAPON LOADED sign in cockpit	)
WAF	RNING IF ARMING WIRE IS INADVERTENTLY WITHDRAWN FROM TDD OR ARMING DEVICE, CLEAR AREA AND NOTIFY PROPER AUTHORITY.	
WAF	IF WHITE "S" ON GREEN BACKGROUND IS NOT VISIBLE IN ARMING DEVICE INSPECTION WINDOW, NOTIFY PROPER AUTHORITY.	
7. 8. 9.	Install arming device safety wire	) ) )
NOTE:	: (MK 62 w/MK 15 ON BRU-33) ARMING ADAPTER CANNOT BE DISCONNECTED UNTIL WEAPON IS LOWERED.	
11.	Disconnect arming wires/lanyards from aircraft	)

# WEAPON UNLOADING (Continued)

		· · · · · · · · · · · · · · · · · · ·	
В.	1. 2.	ILOADING  Raise weapon	)
NO	TE:	MK 62 BRU-33 REMOVE ARMING ADAPTER APPROXIMATELY 2 INCHES BELOW RACK.	
	4.	Lower weapon; (if applicable) remove arming adapter from aircraft	)
	5.	Continue lowering weapon	)